AMENDMENTS TO THE CLAIMS

Claims 1-31. (Cancelled).

Claim 32. (New) : A method for managing a signal, comprising:

generating a plurality of bins, at least one of the bins including a pilot tone sub-symbol;

combining the bins into a symbol; and

transmitting the symbol.

Claim 33. (New) : The method of Claim 32, further comprising modulating the plurality of bins to a predetermined frequency.

Claim 34. (New) : The method of Claim 33, wherein the predetermined frequency is a frequency suitable for transmission along a transmission medium.

Claim 35. (New) : The method of Claim 33, wherein the predetermined frequency is a radio frequency.

Claim 36. (New) : The method of Claim 33, wherein the predetermined frequency is an optical frequency.

Claim 37. (New) : An apparatus for managing a signal, comprising:

a generator that generates a plurality of bins, at least one of the bins including a pilot tone sub-symbol;

a combiner that combines the bins into a symbol; and

a transmitter that transmits the symbol.

Claim 38. (New) : The apparatus of Claim 37, further comprising a mixer that modulates the plurality of bins to a predetermined frequency.

Claim 39. (New) : The apparatus of Claim 38, wherein the predetermined frequency is a frequency suitable for transmission along a transmission medium.

Claim 40. (New) : The apparatus of Claim 38, wherein the predetermined frequency is a radio frequency.

Claim 41. (New) : The apparatus of Claim 38, wherein the predetermined frequency is an optical frequency.

Claim 42. (New) : A method for managing a signal, comprising:

recovering a pilot tone sub-symbol;

calculating a parameter value difference between the pilot tone sub-symbol and a consecutive pilot tone sub-symbol; and

adjusting a clock signal frequency depending on the parameter value difference.

Claim 43. (New) : The method of Claim 42, wherein recovering the pilot tone sub-symbol comprises adjusting the clock signal frequency so that the pilot tone sub-symbol can be received.

Claim 44. (New) : The method of Claim 42, further comprising identifying the pilot tone sub-symbol.

Claim 45. (New) : The method of Claim 44, wherein identifying the pilot tone sub-symbol comprises scanning a plurality of bins to locate a bin containing the pilot tone sub-symbol.

Claim 46. (New) : The method of Claim 42, wherein the parameter comprises phase.

Claim 47. (New) : The method of Claim 42, further comprising using the clock signal frequency for phase locked loop processing.

Claim 48. (New) : An apparatus for managing a signal, comprising:

a clock source that recovers a pilot tone sub-symbol;

a calculator of a parameter value difference between the pilot tone sub-symbol and a consecutive pilot tone sub-symbol; and

an adjustor of a signal frequency of the clock source depending on the parameter value difference.

Claim 49. (New) : The apparatus of Claim 48, wherein the clock source is a voltage controlled oscillator.

Claim 50. (New) : The apparatus of Claim 48, further comprising an identifier of the pilot tone sub-symbol.

Claim 51. (New) : The apparatus of Claim 48, wherein the parameter comprises phase.

Claim 52. (New) : The apparatus of Claim 48, further comprising a phase locked loop processor that processes based on the signal frequency.